

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,907	03/26/2004	Robert M. Keolian	PST-11302/36	9429
25006 75	590 03/02/2006		EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C			AGUIRRECHEA, JAYDI A	
	PO BOX 7021 TROY, MI 48007-7021		ART UNIT	PAPER NUMBER
			2834	
			DATE MAILED: 03/02/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.



	A 11 A1 A1	(Augustian Addition			
	Application No.	Applicant(s)			
Notice of Allowability	10/810,907	KEOLIAN ET AL.			
Notice of Anomability	Examiner	Art Unit			
	Jaydi A. Aguirrechea	2834			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.					
1. This communication is responsive to <u>amendment filed on 2/2/06.</u>					
2. The allowed claim(s) is/are <u>1-24 and 40</u> .					
 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 					
2. Certified copies of the priority documents have been received in Application No					
Copies of the certified copies of the priority documents have been received in this national stage application from the					
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.				
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached					
1) hereto or 2) to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
·					
Attachment(s) 1. Notice of References Cited (PTO-892)	E Notice of Informal D	start Application (DTO 450)			
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		atent Application (PTO-152)			
2. Involice of Draitperson's Patent Drawing Review (P10-946)	 Interview Summary Paper No./Mail Dat 				
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0-Paper No./Mail Date	8), 7. X Examiner's Amendr	nent/Comment			
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. Examiner's Stateme	nt of Reasons for Allowance			
or biological Material	9.				

Application/Control Number: 10/810,907 Page 2

Art Unit: 2834

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas Wathen on 2/13/06.

The application has been amended as follows:

- In claim 40, delete the brackets "[]" and change "mas" for "mass", at the end of the claim; i.e. {as compared to a system without the moving mass}
 - o The limitation should read: "the transducer <u>having</u> a moving mass that serves as a substantial portion of the resonating mass inside the housing <u>such that the moving mass substantially reduces the pressure oscillation</u> frequency of the resonating system as compared to a system without the moving mass."

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: The references of the Prior Art of Record fail to teach or suggest either alone or in obvious combination the limitations as set forth in claims 1, 6, 14, 20 and 40. Reasons for allowance regarding claims 6, 14 and 20 were given in the previous office action. With regards to claims 1 and 40, the combination of the references cited in the prior art fails to disclose the thermo-acoustic core, the gas and the transducer/alternator defining a resonating system with a resonating mass operable to resonate

at the pressure oscillation frequency and the transducer having a moving mass that serves as a substantial portion of the resonating mass inside the housing such that the moving mass substantially reduces the pressure oscillation frequency of the resonating system as compared to a system without the moving mass.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 571-272-2018. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



